

DEMOGRAPHICS

The views expressed in this and other papers associated with the NIC 2020 project are those of individual participants. They are posted for discussion purposes only and do not represent the views of the US Government.

DEMOGRAPHICS

What will be the fiscal and immigration effects in North-East Asian nations (especially Japan) go down the demographic curve? What will be the effects on savings and consumption – and therefore on trade and financial flows? Will social welfare and pension costs depress national defence budgets? Will older populations be less willing to contemplate or conduct military operations?

1. Increase Greying Population by 2020.

By 2020 East Asia and South East Asia population will all have **life expectancy** above 70 year, with Japan, China-Hong Kong and China-Macao above the 80 years level.

Most Asian countries have a life expectancy level between 70-80 years, except for Cambodia (66 years), Timor-Leste (62 years), Laos (66 years), Myanmar (68 years) and Vietnam (69 years) and other similar currently latecomers in development. These are also countries that have suffered serious armed conflicts and serious political disturbances that have delayed their development processes.

Asian population age and sex structure follows the standard structure of a triangle moving slowly and gradually into the direction of a trapezium with narrower base. The countries that are further developed, like Thailand (2000) have a bulge at the age level between 15-35 years level. Moving towards the Japanese age and sex structure with a larger bulge at the 35-75 years level (2020). This changing population age structure makes the Japan experience an important lesson that deserves special attention for Asia.

Since 1950 **Japan's elderly** people of 65 years-plus has experienced rapid growth:

	1950	1980	2000	2020
Total Population (million)	83.6	116.8	127.0	125.6
Population age 65+ (mill.)	4.1	10.6	21.7	35.3
Pop. Age 65+ as % of total	4.9	9.0	17.2	28.1

China's elderly people of 65 years plus show the following growth:

	1950	1980	2000	2020
Total Population (million)	554.8	998.9	1,275.2	1,429.5
Population age 65+ (mill.)	24.8	47.4	87.3	166.7
Pop. Age 65+ as % of total	4.5	4.7	6.8	11.7

Source: UN Economic & Social Affairs, *World Population Prospects, the 2002 Revision, Volume II Sex and Age Distribution of Population*, UN New York 2003.

In 1950 both countries have similar proportion of population above 65 years of age, but the number of elderly people have risen faster in Japan as compared to China. There is a significant difference in income per capita growth between the two countries during the process of aging. Japan has gained significant progress during the years 1950-2000 that has brought their people's income per capita at US\$ 32,601 (2001).

Japanese economic growth has improved health and education that improves the quality of life that makes a longer length of life possible.

This differs with China, who is still struggling to get over the hump into the economic take off. Although increasing, China has is still at the low-income level country with a per capita income of US\$ 911 (2001). China must meet the growing elderly group of population while struggling with competing demands from the younger age group to be accommodated with a meagre income level.

This also implies that the way these countries are coping with the aging problem is rather different. Japanese economic capacity, albeit facing difficulties in meeting the needs of an increasing aging population, is much stronger to carry the burden as compared to the Chinese economy.

2. Impact of Sex Ratio.

Significant is also the decline in **sex ratio** between the populations in most Asian nations. A typical trend is the expected trend of decline of sex ratio, i.e. the number of males per 100 females, in Japan from 96.2 (1950) to 93.5 (2020). Woman outlives man. Above the 65 years of age the number of older women grow faster than older men in 2020.

The trend among women in East and South-East Asia is to have smaller number of children. Nucleus family gradually replaces extended family patterns with parents as the centre. This is especially true in fast growing economies, like Japan, Singapore, and Thailand. But it also means that the elderly people cannot be depended on their small number of children for their continuous support for living. It is here that the capacity of government to develop national pension system becomes crucial.

Meanwhile Chinese population has since 1950 already a male dominated sex ration of 108.1, which is slightly changed to 103 (2020). Most countries have a sex ratio of less than 100. With a growing economy and rising income, this may lead towards female workers migration from neighbouring countries, especially speaking the same language, that may end in “contract marriages” as has been the case in “enclave economy” development in extractive industries. Sex related activities might accompany the increase clustering of male workers in industrial centres and urban area. It may also lead towards marriages outside China, especially for those who used to go abroad. In general this male dominated sex ratio may create repercussions in China’s social life development. Gender issues may need special efforts to obtain the right treatments it deserves.

With a growing male dominated population factor, China will be best equipped to engage a labour based economic development. Population density in China by 2020 is 149 people per sq km opens the possibility to enrich natural resources and use labour force to add its value.

But Japan's population density is 332 people per sq km, with continued growth in the elderly people. This raises the need to develop opportunities to employ elderly people not so much for their manual strength but rather for their intellectual capabilities. It implies that Japan must move away from the traditional labour based industrial development and moves into "brain service industries" to make maximum use of the experience, wisdom and intellectual capacities of the age-growing people of Japan, which makes adding value to natural resources through human resource development in Japan a much pressing needs than it is in China. The rising competitive advantage of the countries surrounding Japan makes it impossible for Japan to maintain industries that requires cheaper labour. Japan's greying population makes it a necessity that Japan changes its economic structure away from highly subsidized agriculture with a declining number of farmers, into a highly skilled service sector that can employ the elderly whose intellectual capabilities are still in tact.

The growing number of youth, especially women, in Southeast and South-Asia put pressure on the growing and industrialized countries to make migration more lenient. With globalisation the free flow of goods has been introduced, followed by the flow of capital. This is to be followed by 2020 with the free flow of technology and free flow of labour. It may start with the growing demand for opening up intellectual property rights for health and basic needs. The need for flow of labour will be initiated in services that cannot be provided by the country's own people, because of aging. This flow of labour may be induced by virtue of common language, common religion and common culture. This will stimulate the need to acquire the knowledge and ability to speak Chinese, India and Malay, which is complementary to English.

3. Economic Implications.

With a small proportion of elderly people combined with a larger number of current earners has made many Asian governments not yet pressed for developing old age security system. Furthermore the prevailing customs and traditions in which children takes care of their parents have made the need for caring the elderly not a high priority for governments. If however the overall trend is that aging of Asia populations becomes increasingly important, it will be useful to look into the way Japan is encountering this issue today and in the future.

An OECD 1996 study has estimated that the net present value of the unfounded liabilities in the Japanese national pension system is at 70% of their 1994 Gross Domestic Product. This is clearly not sustainable. If no radical changes are made, the Japan's annual deficit may well approach 7% of GDP by 2025, and the total "pure aging effect" on public finances for 2000 to 2030 could be a debt equal to 190% of 2000 GDP. Population aging in Japan may negatively affect the actuarially unviable state of the country's national pension system and the looming liabilities for its public health sector.¹

¹ Nicholas Eberstadt, *Power and Population in Asia*, essay adapted from "Strategic Asia 2003-2004", National Bureau of Asian Research, mimeographed.

Discussion paper -- does not represent the views of the US Government

As it now stands apparently “the greying of the Japanese people” has not been considered as a mainstream consideration in the overall macro-economic policies, as well as in the various Japanese sectoral development. With the greying of the Japanese people, its economy needs adjustments, to accommodate for the changing fiscal revenues. The prevailing “pay as you go system”, in which retirees are supported by current earners cannot be sustainable, especially if the number of retirees grows faster than the current earners as the consequence of changing age structure and aging of population.

Many Asian nations’ employment policies have an “anti aging remuneration policy”. The mandatory retirement ages level is low and it ranges between 55 to 60 years. It is even lower for women. The intention is to create employment for the young. The seniority system that is linked with growing ages of the employed, does not match rising productivity with lowering costs. There are no incentives for retraining and upgrading in education. In brief the prevailing system is not geared to meet the changing condition of an aging population.

Savings rate in many Asian countries are increasing, reflecting the awareness of the elderly people to prepare for their retirement age. Japan’s rate of saving is still high, especially to meet the need of the elderly who has no children to fall back for support. But with a slow growing economy and a low rate of return on savings and investments, it becomes clear that the prevailing system is not equipped to meet the growing aging population of Asia.

Changing long term conditions into a growing greying population require the need for mainstreaming the needs of greying population into the flow of macro-economic and sector policy development. Several steps need to be considered.

First, a policy to prepare for a changing supply of aging labour through creating facilities for re-education and re-training to be matched with changing demand for labour. It implies that the mandatory retirement age level, the automatic seniority system that is linked with aging, need change. Employment options must be made more flexible and part-time employment especially for women need to be opened. The rigidity in many labour laws needs to be reviewed.

Second, a policy that affects the demand of aging labour by gradually moving the nation away from highly subsidized and distorted domestic economy towards a more open economy making maximum use of the nation’s competitive advantages in a global economy. The pool of aging people is trained making maximum use of their experiences and wisdom, that can also be made available in less skilled Asian countries. Policymaking is now also considering how to make optimum use of retired skills in a global economy. This also implies that migration policies must meet the needs of such flow of skills among Asian countries. With aging, certain services that the aging people needs can also be met by inflow of these skills from other countries, such as nursing. A more flexible migration policy will be needed to meet the growing change of aging population.

Third, pension program may be costly for developing Asian nations. Governments need to create incentives to turn the tide against rising individualism, domination of nucleus family and small family houses that gives no room for older parents. Singapore and Malaysia have already taken measures to make children legally responsible for the support of their elderly parents. Many East and Southeast Asian countries provide adult day care and support services to assist adult children to care for their elderly parents. Malaysia and Singapore have revised public housing policies to accommodate for multi generational living arrangements. Malaysia also provides tax incentives to family for elderly care.²

While these steps are necessary, they are however not sufficient. With an increasing global economy the development of a more secure financial architecture that is able to prevent high and unpredictable waves of monetary fluctuations must be in place to cope with the needs of the increase numbers of elderly people of Asia for a secure return of their savings and investments. The rising needs for a secure financial architecture may well raise the incentives for moving towards a single monetary unity type of arrangements among the extended ASEAN by 2020.

4. Towards Multilateral Cooperation.

Social and pension costs will increase and require a bigger share of the nation's budget. A sharper priority setting in budget spending is required, especially for non-welfare related expenditures.

The complexity of the world situation in 2020 makes it impossible for any single nation to meet their security needs unilaterally. Conflicts that will require military operations will be so cumbersome, sophisticated and expensive that the need grows towards a multilateral approach in settling not only economic issues but political and military conflicts as well. Regional cooperative arrangements, such as ASEAN, SEARC and others, as well as international organizations, especially the United Nations, will be increasingly important. It is in this context that there is a strong desire to improve the United Nations and raising the Asian representation in the Security Council. Spurred by the high costs of military operation and recognizing the existence of conflict areas in Asia, such as between North and South Korea, India and Pakistan and others, the UN is expected as the main vehicle to settle these conflicts through multilateral arrangements by in due course towards 2020.

One important burning conflict that must be settled **before** 2020 is the Korean issue. In due course of 2005-2020 the South Korean economy will be growing much faster than North Korea in an environment where Japan and China will change. In terms of numbers of population, level of education, quality of health and rate of economic growth, South Korea will expand faster than North Korea. This creates pressure for the North Korean people to "jump over the wall" and to leave North Korea. An open armed conflict however is not feasible and an intervention by UN is most likely. The merging of two

² East-West Center Research Program, Population and Health Studies, *The Future of Population in Asia*, Honolulu, East-West Center, USA, 2002.

Discussion paper -- does not represent the views of the US Government

Korea in a modified form of federalism may be feasible before 2020. The solution of this problem may make Northern East Asia a centre of Asian growth.

The existence of large supply of labour and potential consumers, the availability of natural resources and the easy access through transportation, makes China, India and Indonesia prospective nations to become the “locomotive” of global development in the coming decades, provided these countries are able to reach for good governance.

China is aspiring for reaching a welfare level symbolized by “one car per family” in 2020. This aspiration at once indicates that in addition to raise the Asian nations’ level of prosperity, also important becomes the path of development that these nations will follow. The “one car per family” goal needs to be met by a different pattern of development that is more sustainable. Among others by shifting from a fossil fuel based technology towards a clean renewable energy based technology. Otherwise this “business as usual” pattern of development may have its negative impacts on raising the carbon dioxide level of emissions that affects global warming and climate change at the detrimental costs of Asian developing countries. Bangladesh, Laos, Indonesia, the Philippines will suffer increase frequency of floods. Many islands of Asia may well be sinking. Climate change may negatively affect food and agricultural production. In brief, this goal of “one car per family” can only be justified if it is reached along the path of sustainable development.

With Asia is launching development in this different path of sustainability; the global world will also have the chance to meet a more prosperous and sustainable livelihood for all humanity by 2020.